CHAPTER 7

PREVENTIVE MAINTENANCE FOR BUILDINGS AND STRUCTURES OTHER THAN FAMILY HOUSING

7-1. General

a. The objectives of PM in all Army buildings and structures are stated in paragraph 1-4 Additionally, cyclic PM is important --

(1) To protect facilities from deterioration.

(2) To ensure that buildings and structures adequately support their assigned missions.

b. This chapter includes specific instructions for applying PM guidelines to buildings other than family housing. These buildings include training, maintenance and production, research, development and test, storage, hospital and medical, administrative, and troop housing.

c. Due to the many types of Army buildings and structures, PM priorities, performance cycles, and manpower requirements will vary with the levels of use and wear. The guidelines stated in this chapter should be applied to various types of buildings and structures where appropriate.

7-2. Preventive Maintenance Guidelines

Facilities Engineers should document their program accurately, adhering to as closely as possible, the PM guidelines in Chapter 3.

a. Building Use and Cycles. Some buildings are occupied twenty-four hours a day by large numbers of personnel. Others, such as storage facilities are used less frequently. Residential spaces, including troop quarters, are used heavily and must be serviced frequently. PM requirements should be scheduled on the level of use and the mission being performed in the particular building.

b. Planning and Scheduling. The Facilities Engineer and departments occupying buildings should cooperate in planning for PM. PM is a support function and should not be scheduled to interfere with the designated mission of any given building.

c. Recommended Cycles for Building Mission Types. The optimum cycle for PM of an entire installation is approximately 120 days. It is anticipated that installations will choose cycles between 90 and 180 days, depending on local requirements. Figure 7-1 is a list of recommended inspection frequencies for buildings with varying missions. Buildings with recommended inspection frequencies longer than the established PM cycle— will not necessarily be inspected every cycle.

"Recommended Inspection/Service Frequencies by Buildings Mission"

Type of Facility	Inspection Frequency (days)
Hospitals and Medical Facilities	90 - 120
Training Facilities	120 - 180
Dining Facilities	90 - 120
Troop Housing	90 - 120
Administrative	120 - 180
Recreational Facilities	90 - 180
Maintenance & Production	180
Research & Development	90 - 120
Storage	180

Figure 7-1. Recommended Inspection/Service Frequencies by Buildings Mission

7-3.Hospitals and Medical Buildings

a. General Due to the critical mission of hospitals, PM units must avoid any undue interference or disruption during their scheduled daily operation. The work must be performed in an orderly and efficient manner and immediate response work requests should not be handled by PM personnel unless personnel regularly assigned for this purpose are unavailable.

b. Organization Guidelines found below should be followed to develop and maintain effective PM programs in hospitals and medical buildings. Normally, either the Utilities Division or a Hospital Support Division is responsible for maintenance in these buildings. PM may be assigned to the hospital maintenance division or incorporated into the base-wide PM program, depending on the size of facility.

(1) *Calculation of Manpower.* A calculation should be made to determine whether the size of hospital facilities warrants assignment of full-time PM personnel to the Hospital Maintenance Division. Using the standards for hospitals found in Chapter 3 (Figure 3-2) calculate the number of man-hours required to complete PM during any chosen cycle. Shorter cycles will require more manpower. As a general rule, hospitals requiring less than one team assigned full time to PM should be incorporated into a PM area as a regularly scheduled stop. Where the size of hospitals in a PM area requires more than one full-time team, PM personnel may be permanently assigned to the Hospital Maintenance Division or the hospital may be treated as other buildings and incorporated into a PM area. A sample calculation of this type is provided in figure 7-2.

Hospital	Sized Building (sq. ft.)	Labor Standard (man-hour/1000 sq. ft.)	Man-Hours Req'd per cycle	Personnel Req'd. Per Year
A 90 day cycle 120 day cycle	627,000	2,000	1254	2.85
B 90 day cycle 120 day cycle	62,700	2,000	125.4 125.4	.285[1] .213[1]

[1]Note that this annual manpower requirement would necessitate the use of preventive maintenance personnel for other duties if assigned permanently to the hospital maintenance division. Therefore, Hospital B should simply be incorporated into the base-wide program of scheduled visits.

Figure 7-2. Calculation of Manpower Requirements

(2) *Organization of PM in Medical Buildings other than Hospitals.* The PM requirements of medical buildings other than hospitals are not distinctly different from other facilities. These buildings should be incorporated into the base-wide PM cycle using guidelines provided in Chapter 3.

c. Preventive Maintenance of Utilities. PM of equipment and utility Systems in hospitals and medical buildings is the responsibility of maintenance personnel operating within the Utilities Division.

7-4. Bachelor Quarters

a. The objectives of PM in bachelor quarters are as follows:

(1) To protect quarters from deterioration.

(2) To perform necessary minor maintenance and repair promptly while quarters are occupied and to schedule and perform necessary minor maintenance and repair between occupancies in a timely and expeditious manner.

b. PM of BOQ/VOQ facilities should be accomplished according to guidelines provided in Chapter 3, with the additional requirement that occupants will be requested at check-in to report any deficiencies observed during their stay on the BOQ/VOQ Service Card (Illustration 7-1). Cooperation between the Billeting Manager and the PM Shop Foreman is necessary to insure regularly scheduled, cyclic maintenance is accomplished

without inconveniencing short term occupants of these quarters.

c. Enlisted Men's Quarters. When the EMQ is visited by the PM Unit, the leader-inspector should be accompanied on the inspection tour of the building by the NCO -in-charge to point out any work requirements that are the responsibilities of self-help or should be reported by work order request. The leader-inspector should also check to see that the NCO-in-Charge has the current authorized self-help work list.

7-5. Troop Areas and Other Installation Buildings

Generally, all buildings and structures other than family housing, bachelor quarters, and hospitals will be included in the installation-wide program and receive scheduled, cyclic PM. Differences in level of use and special requirements are reflected in the performance standards in Chapter 3. Inspection frequencies also vary, and are given in figure 7-1.

a. Preventive Maintenance Reminder Sheet. All buildings covered by the installation-wide PM program should have a copy of the PM Reminder Sheet (Illustration 3-6) posted in a place designated by the Facilities Engineer. When an occupant discovers work requirements, he/she should note the problem on the record along with his/her name and the date. Since the PM unit is responsible for correcting work requirements, referring it to the appropriate shop for correction or referring it to the NCO in charge of the building as self-help, the occupant can confirm that the deficiency has been acted on by checking to see that the record has been countersigned.

b. Self-help Support. To support Cyclic PM, self-help should be accomplished in any building by appropriately qualified personnel with the permission of the Facilities Engineer, according to guidelines provided in Chapter 4.

7-6. Structures

a. Locations. All structures will automatically be included in PM areas since the entire installation is subdivided geographically. PM of these structures should not be overlooked by units assigned to each area.

b. Planning. PM workers operating in areas with structures should document time and materials required for future planning. PM checklists should developed for each unique structure.

c. Reporting. The NCOIC of the nearest building should be made responsible for reporting maintenance problems discovered in structures by one of two means:

(1) By making an entry on the PM Reminder Sheet in the building nearest to the structure.

(2) By reporting the item to the Work Reception Desk.

7-7. Off-Post Facilities

Figure 3-4 provides information on calculating manpower for off-post facilities and reserve centers. PM of off-post facilities should be planned and scheduled to minimize travel time. In some cases, Facilities Engineers may be justified in contracting out maintenance of these facilities because the cost of providing FE service is greater than that of con-tractor performance.

7-8. Use of a Preventive Maintenance Checklist and Work Guides in Buildings other Than Family Housing.

a. One Standard Buildings and Structures PM Checklist/Record format is used by PM units in all buildings. Instructions for completing and handling this format are given in Chapter 3.

b. Sample Work Guides are outlined in Chapter 8.

BOQ/VOQ Service Card

In order to provide better service to BOQ/VOQ occupants, this card is being provided to all occupants. Please be specific when writing the nature of your comment, problem or suggestion.

Deliver this card to the main desk when you have filled it out. Prompt action will be taken.

NATURE OF PROBLEM/COMMENT _____

_____

_____

_____

_____

SUGGESTIONS FOR IMPROVED SERVICE _____

_____

_____

_____

_____

Name _____

Bldg. _____ Room _____

Illustration 7-1. BOQ/VOQ Service Card (FORMAT)